(54) Title: METHOD AND DEVICE FOR ACCURATELY POSITIONING A PATTERN ON A SUBSTRATE
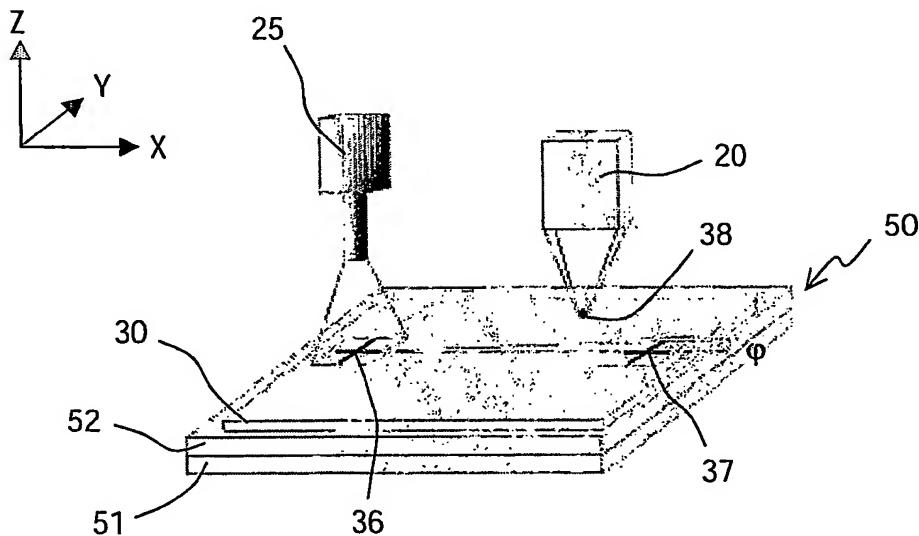
(57) Abstract: A printing machine comprises an X-Y table (50) for moving a substrate (30) with respect to a print head (20). During
a printing process, the substrate (30) is moved, whereas the print head (20) is intermittently activated to fire ink droplets. A camera
(25) is arranged for providing images of the substrate (30) to a computer which is programmed to recognize patterns. In order for the
print head (20) to be able to print a spot at a predetermined position on the substrate (30), an offset between a predetermined and an
actual mutual position of the substrate (30) and the print head (20) is measured and compensated for. For the purpose of measuring
this offset, a test spot (38) is printed on the substrate (30) and an offset between a predetermined and an actually obtained position
of this test spot (38) is measured by means of pattern recognition.

Declaration under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.